

RECEIVED  
CENTRAL FAX CENTER

SEP 06 2005

Setter Ollila LLC  
2060 Broadway  
Suite 300  
Boulder, Colorado 80302PATENT APPLICATION  
ATTORNEY DOCKET NO. 1487IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Fred S. Cook

Serial No.: 09/920,489

Examiner: Randy Peaches

Filing Date: 8/01/2001

Group Art Unit: 2686

Title: Communication system for call alerting

Mail Stop Appeal Brief - Patents  
COMMISSIONER FOR PATENTS  
P. O. Box 1450  
Alexandria, VA 22313-1450BRIEF ON APPEAL

## INTRODUCTION

Pursuant to the provisions of 37 CFR § 1.191 *et seq.*, applicants hereby appeal to the Board of Patent Appeals and Interferences (the "Board") from the examiner's final rejection dated 9/29/2004. A notice of appeal was sent on the same day as this appeal brief. This brief on appeal is accompanied by the requisite fee (37 CFR 1.192(a) and 1.17(f)).

## REAL PARTY IN INTEREST

The entire interest in the present application has been assigned to Sprint Communications Company, L. P. as recorded at Reel 012074, Frame 0926 for the parent application.

Docket No. 1487

page 1 of 18

Serial No. 09/920,489

**RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences.

**STATUS OF CLAIMS**

Claims 1, 3 - 8, 10 - 15, 17 - 21, and 23 - 32 are pending.

Claims 2, 9, 16, and 22 have been canceled.

Claims 1, 3 - 8, 10 - 15, 17 - 21, and 23 - 32 have been finally rejected.

Claims 1, 3 - 8, 10 - 15, 17 - 21, and 23 - 32 are on appeal.

**STATUS OF AMENDMENTS**

There are no pending amendments.

**SUMMARY OF INVENTION**

This invention relates generally to a communication system for call alerting. A service control point (SCP) receives a call set-up message for an incoming call. The SCP processes the call set-up message to identify a wireless communication interface. The SCP then generates an alert message indicating the incoming call and caller information from the call set-up message. The SCP transmits the alert message to the wireless communication interface. The SCP receives a response message wherein the response message indicates a destination communication device to receive the incoming call. The SCP then processes the response message to generate a routing instruction that connects the incoming call to the destination communication device. The SCP then transmits the routing instruction (page 4 lines 21 - 30).

By notifying a user of an incoming call, the invention advantageously allows all communications types to be handled by a destination communication device that is available and capable to handle the incoming call. A mobile user can then be notified through their own wireless

communication device of an incoming call and find a destination communication device to receive the incoming call. Additionally, the invention allows the user to specify which destination communication device in a shared pool of communication devices should receive the incoming call (page 5 line 25 through page 6 line 3).

### ISSUES

1. Whether claims 1, 3 - 7, and 24 - 26 are anticipated under 35 U.S.C. § 102(b) by Connolly et al (US 5,325,419).
2. Whether claims 8, 10 - 15, 17 - 21 and 23 are unpatentable under 35 U.S.C. § 103(a) over Connolly et al (US 5,325,419) in view of Torba et al (US 6,563,788).
3. Whether claims 27 - 29 are unpatentable under 35 U.S.C. § 103(a) over Connolly et al (US 5,325,419) in view of Criss et al (US 6,643,506).
4. Whether claims 30 - 32 are unpatentable under 35 U.S.C. § 103(a) over Connolly et al (US 5,325,419) in view of Janow et al (US 6,061,570).

### GROUPING OF CLAIMS

For the purpose of this appeal claims 1, 3 - 7, and 24 - 26 stand or fall together. Claims 8, 10 - 15, 17 - 21 and 23 stand or fall together. Claims 27 - 29 stand or fall together. And claims 30 - 32 stand or fall together as discussed in the following argument section.

## ARGUMENT

### OUTLINE

- I. Summary of the brief on appeal.
- II. Summary of the requirements for *prima facie* anticipation.
- III. Summary of the requirements for *prima facie* obviousness
- IV. Claims 1, 3 - 7, and 24 - 26 rejection.
- V. Claims 8, 10 - 15, 17 - 21 and 23 rejection.
- VI. Claims 27 - 29 rejection.
- VII. Claims 30 - 32 rejection.

#### I. Summary of the brief on appeal

- A. The 35 U.S.C. § 102(b) rejection of claims 1, 3 - 7, and 24 - 26 is improper because a *prima facie* case for anticipation has not been established, for the following reasons: (1) the cited art does not teach or suggest every element of the claim, (2) the examiner incorrectly characterizes the cited art..
- B. The 35 U.S.C. § 103(a) rejection of claims 8, 10 - 15, 17 - 21 and 23 is improper because a *prima facie* case for obviousness has not been established, for the following reasons: (1) the cited art does not teach or suggest every element of the claims, (2) the examiner incorrectly characterizes the cited art (3) there was no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.
- C. The 35 U.S.C. § 103(a) rejection of claims 27 - 29 is improper because a *prima facie* case for obviousness has not been established, for the following reasons: (1) the cited art does not teach or suggest every element of the claims, (2) the examiner

incorrectly characterizes the cited art (3) there was no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

D. The 35 U.S.C. § 103(a) rejection of claims 30 - 32 is improper because a *prima facie* case for obviousness has not been established, for the following reasons: (1) the cited art does not teach or suggest every element of the claims, (2) the examiner incorrectly characterizes the cited art (3) there was no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

## II. Summary of the requirements for *prima facie* anticipation (102).

### MPEP 2131

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed Cir. 1987).

"The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

"The elements must be arranged as required by the claim, but ... identity of terminology is not required." *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

## III. Summary of the requirements for *prima facie* obviousness (103).

### MPEP 2143.03

The prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

If an independent claim is nonobvious under 35 U.S.C. 103, then any claim dependent therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

"To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." MPEP 2142. "The teaching or suggestion to make the claimed combination... must both be found in the prior art, and not based on applicant's disclosure." *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). "The level of skill in the art cannot be relied upon to provide the suggestion to combine references." *Al-Site corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999). "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggest the desirability of the combination" *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

#### IV. Claims 1, 3 - 7, and 24 - 26 rejection.

Independent claims 1 and 24 are rejected under 35 USC 102(b) as being anticipated by Connolly et al (5,325,419). Claim 1 is reproduced below with labels (a) and (b) added.

1. A method of operating a service control point, the method comprising:
  - receiving a call set-up message into the service control point for an incoming call;
  - processing the call set-up message to identify a first device where the first device is a wireless device;
  - generating an alert message indicating the incoming call and caller information from the call set-up message;
  - (a) transmitting the alert message from the service control point to the first device;
  - (b) receiving a response message into the service control point from the first device wherein the response message indicates a second device to receive the incoming call;

processing the response message to generate a routing instruction that connects the incoming call to the second device; and  
transmitting the routing instruction from the service control point. (Labels added)

In claim 1, step (a) requires that a service control point (SCP) sends an alert message to a first wireless device indicating that the first wireless device has an incoming call. In step (b) the first wireless device sends a message back to the SCP identifying a second device and indicating that the SCP should re-direct the incoming call to the second device.

Connolly does not teach having a wireless device that redirects an incoming call to a second device in response to an alert message about the incoming call. Figure 11, described in columns 31 and 32, shows an incoming call to a portable handset terminal. The portable handset terminal must be the first wireless device of claim 1, because the portable handset terminal is the only wireless device in figure 11. PSC and PSC2 are not wireless devices, PSC and PSC2 are PCS switching center (see bottom of figure 2 for PSC definition) that corresponds to item 16 in figure 1, and IBS is an intelligent base station. Figure 11 is a sequence diagram for an incoming call to the portable handset terminal (see column 31 lines 5 – 8). The only message received by the SCP after the portable handset terminal has received the alert message (H15) is message H21. Message H21 is described in column 33 lines 10 – 20 and is an AIN service request message that identifies the portable handset terminal and starts the authentication process. The sequence of messages shown in figure 11 between the SCP and the portable handset terminal end up with the incoming call connected to the portable handset terminal (see column 34, lines 4 – 5) not to a second device. There is no message from the portable handset terminal that redirects the incoming call to a second device as required by claim 1.

In the examiners response to arguments section of the current office action, the examiner states that columns 31 and 32 teach “receiving of an incoming call from a first device” (underline added). Applicant does not disagree, columns 31 and 32 do show an incoming call from a first device. But the “first device” as described by the examiner (the device the call is from) is not a wireless device. The call does go to a wireless device, but the examiner does not consider the wireless device as the first device. Claim 1 requires an incoming call to (not from) a first device. Claim 1 also requires that the first device is a wireless device that sends a message to the service control point indicating that the incoming call should be sent to a second device (as discussed

above).

Connolly does allow a user to have calls forwarded to a voice mail service if the wireless phone is busy or a no answer condition exist. But the incoming call to a portable device in Connolly is not dynamically redirected to the second device by the first device (the wireless phone). The current invention allows such an action. For example, if a fax call is directed to a portable phone (incoming to the first device) the portable phone will be alerted by the SCP that it has an incoming fax call. The SCP alerts the portable phone to the incoming fax call using the alert message (step a). The portable phone may not be able to handle a fax. However there may be a fax machine nearby. The portable phone may send a message back to the SCP indicating that the SCP should redirect the incoming fax call to the nearby fax machine. Connolly does not have this capability.

In column 36 lines 48 – 61 the user in Connolly has subscribed to a call forwarding service that automatically redirecting an incoming call to a second device (a voice mail service) when no one answers an incoming call. The cited text indicates the SCP in Connolly first determines if the user has subscribed to a call forwarding service on the no answer condition. The SCP in Connolly checks a user profile to determine if the user has subscribed to the service (see column 34 lines 25 – 30). If the user has subscribed then the SCP sends “a forward call message to PSC2” (Column 36 lines 48 – 50, and lines 53 – 58). The forward call message contains the called party ID to which the PSC2 is instructed to forward the call.

The PSC2 is not a wireless device, the PSC2 is a PCS switching center (see bottom of figure 2 for PSC definition) that corresponds to item 16 in figure 1. Handsets 12 in figure 1 correspond to the first wireless device in the current application. The handset in Connolly does not send a message to the SCP telling the SCP where the call should be redirected to in response to an alert message. The handset in Connolly does not detect the no answer condition, the portable communication system switching center (PSC2) detects the no answer condition when a ringing timeout time expires (Column 34 lines 20 – 21). The PSC2 notifies the SCP in Connolly that a no answer condition exists and then the SCP determines what to do. The wireless device (the handset 12) in Connolly does not send the message to the SCP, in fact the handset in Connolly does not even know that a “no answer” condition exist, and therefore does not take any action in response to the incoming call that causes the incoming call to be redirected. The



handset may have taken an action before the incoming call was received to turn on the call forwarding service. But claim 1 requires that it is the first wireless device that redirects the call in response to an alert message identifying the incoming call.

The examiner, in the current office action, has cited figure 15 and column 41 and column 42 as teaching the receiving of a call at a first device and forwarding that same information to a second device if conditions are met. Figure 15 and column 41 and column 42 describe when an incoming call encounters the "busy" condition. This condition is handled the same way as the "no-answer" condition as describe above. The SCP detects the busy condition and forwards the incoming call to the voice mail service if the caller had previously enabled this feature. The wireless device in Connolly does not indicate to the SCP where the incoming call should be sent, as required by claim 1.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed Cir. 1987). Here, the cited art does not teach having a first wireless device redirect an incoming call to a second device in response to an alert message, therefore the cited prior art does not fulfilled the requirements for a *prima facie* case of anticipation. Therefore claim 1 is allowable as written.

Claims 3 - 7 are dependent on allowable claim 1 and are therefore allowable.

The arguments for claim 1 (above) apply to claim 24. Therefore claim 24 is allowable.

Claims 25 and 26 are dependent on allowable claim 24 and are therefore allowable.

#### **V. Claims 8, 10 - 15, 17 - 21 and 23 rejection.**

Claims 8 is rejected under 35 USC 103(a) as being unpatentable over Connolly et al (5,325,419) in view of Torba et al (6,563,788).

Claim 8 requires a service control point that "receive a call set-up message for an incoming call, process the call set-up message to identify a first device where the first device is a wireless device, generate an alert message indicating the incoming call and caller information from the call set-up message, transmit the alert message to the first device, receive a response message from the first device wherein the response message indicates a second device to receive the incoming call, process the response message to generate a routing instruction that connects

the incoming call to the second device, and transmit the routing instruction." As discussed above for the claim 1 rejection, Connolly does not teach having an SCP that sends an alert message to a first wireless device where the SCP receives a response from the first wireless device indicating that the incoming call should be redirected to a second device. Torba et al. does not teach an SCP that sends an alert message to a first wireless device where the SCP receives a response from the first wireless device indicating that the incoming call should be redirected to a second device, as required by claim 8.

The prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Here, the cited prior art does not teach an SCP that sends an alert message to a first wireless device where the SCP receives a response from the first wireless device indicating that the incoming call should be redirected to a second device, therefore the cited prior art does not fulfilled the requirements for a *prima facie* case of obviousness. Therefore claim 8 is allowable as written.

Claims 10 – 14 are dependent on allowable claim 8 and are therefore allowable.

The arguments for claim 8 (above) apply to claim 15. Therefore claim 15 is allowable.

Claims 17 – 21, and 23 are dependent on allowable claim 15 and are therefore allowable.

#### **VI. Claims 27 - 29 rejection.**

Claims 27 is rejected under 35 USC 103(a) as being unpatentable over Connolly et al (5,325,419) in view of Criss et al (6,643,506).

Claim 27 requires a "wireless communication device software operational when executed by a processor to direct the processor to receive an alert message indicating an incoming call and caller information from a service control point, process the alert message, determine a destination communication device for the incoming call, where the destination communication device is different from the wireless communication device, generate a response message indicating the destination communication device to receive the incoming call, and transmit the response message to the service control point." As discussed above for the claim 1 rejection, Connolly does not teach having wireless device that receives an alert message about an incoming call and then redirects the incoming call to a second device by sending a message to

the SCP. Criss et al. does not teach receiving an alert message in a wireless device indicating an incoming call and having the wireless device redirecting the incoming call to a second device by sending a message to an SCP, as required by claim 27.

The prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Here, the cited prior art does not teach receiving an alert message in a wireless device indicating an incoming call and having the wireless device redirecting the incoming call to a second device by sending a message to an SCP, therefore the cited prior art does not fulfilled the requirements for a *prima facie* case of obviousness. Therefore claim 27 is allowable as written.

Claims 28 and 29 are dependent on allowable claim 27 and are therefore allowable.

#### VII. Claims 30 - 32 rejection.

Claims 30 is rejected under 35 USC 103(a) as being unpatentable over Connolly et al (5,325,419) in view of Janow et al (6,061,570).

Claim 30 requires a "a processor configured to receive an alert message indicating an incoming call and caller information from an interface, process the alert message, determine a destination communication device for the incoming call, where the destination communication device is different from the wireless communication device, generate a response message indicating the destination communication device to receive the incoming call, and transmit the response message to the interface." As discussed above for the claim 1 rejection, Connolly does not teach having first device that receives an alert message about an incoming call and then redirects the incoming call to a second device by sending a message from the first device. Janow et al. does not teach receiving an alert message in a first device indicating an incoming call and having the first device redirecting the incoming call to a second device by sending a message to back to the interface, as required by claim 30.

The prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Here, the cited prior art does not teach receiving an alert message in a first device indicating an incoming call and having the first device redirecting the incoming call to a second device by sending a message

to back to the interface, therefore the cited prior art does not fulfilled the requirements for a *prima facie* case of obviousness. Therefore claim 30 is allowable as written.

Claims 31 and 32 are dependent on allowable claim 30 and are therefore allowable.

**Conclusion**

In view of the above, applicant respectfully request that the examiner's rejection of claims 1, 3 - 8, 10 - 15, 17 - 21, and 23 - 32 be reversed.

Respectfully submitted,

Date: 9/1/05

  
**SIGNATURE OF PRACTITIONER**

Steven L. Webb, Reg. No. 44,395  
Duft Setter Ollila & Bornsen LLC  
Telephone: (303) 938-9999 ext. 22  
Facsimile: (303) 938-9995

**Correspondence address:**

**CUSTOMER NO. 28004**

Attn: Harley R. Ball  
6391 Sprint Parkway  
Mailstop: KSOPHT0101-Z2100  
Overland Park, KS 66251-2100

**APPENDIX I  
CLAIMS CURRENTLY PENDING**

1. A method of operating a service control point, the method comprising:
  - receiving a call set-up message into the service control point for an incoming call;
  - processing the call set-up message to identify a first device where the first device is a wireless device;
  - generating an alert message indicating the incoming call and caller information from the call set-up message;
  - transmitting the alert message from the service control point to the first device;
  - receiving a response message into the service control point from the first device wherein the response message indicates a second device to receive the incoming call;
  - processing the response message to generate a routing instruction that connects the incoming call to the second device; and
  - transmitting the routing instruction from the service control point.
2. (Canceled).
3. The method of claim 2 wherein the second device comprises a pager, a personal digital assistant, or a cellular phone.
4. The method of claim 1 wherein the call set-up message comprises a Transaction Capabilities Application Part query.
5. The method of claim 1 wherein the alert message comprises a called number, a dialed number, or a caller number.
6. The method of claim 1 further comprising determining whether the incoming call is to be intercepted for a called party.
7. The method of claim 1 further comprising generating a session for the incoming call with a

session identifier.

8. A software product for operating a service control point comprising:

service control point software operational when executed by a processor to direct the processor to receive a call set-up message for an incoming call, process the call set-up message to identify a first device where the first device is a wireless device, generate an alert message indicating the incoming call and caller information from the call set-up message, transmit the alert message to the first device, receive a response message from the first device wherein the response message indicates a second device to receive the incoming call, process the response message to generate a routing instruction that connects the incoming call to the second device, and transmit the routing instruction; and

a software storage medium operational to store the service control point software.

9. (Canceled).

10. The software product of claim 9 wherein the first device comprises a pager, a personal digital assistant, or a cellular phone.

11. The software product of claim 8 wherein the call set-up message comprises a Transaction Capabilities Application Part query.

12. The software product of claim 8 wherein the alert message comprises a called number, a dialed number, or a caller number.

13. The software product of claim 8 wherein the service control point software is operational when executed by the processor to direct the processor to determine whether the incoming call is to be intercepted for a called party.

14. The software product of claim 8 wherein the service control point software is operational when executed by the processor to direct the processor to generate a session for the incoming call

with a session identifier.

15. A communication system comprising:

a service control point (SCP) comprising:

a processor configured to receive a call set-up message for an incoming call, process the call set-up message to identify a first device where the first device is a wireless device, generate an alert message indicating the incoming call and caller information from the call set-up message, transmit the alert message to an SCP interface, receive a response message from the first device wherein the response message indicates a second device to receive the incoming call, process the response message to generate a routing instruction that connects the incoming call to the second device, and transmit the routing instruction; and

the SCP interface connected to the processor and configured to transfer the call set-up message to the processor, transfer the alert message from the processor to the first device, and transfer the routing instruction from the processor.

16. (Canceled).

17. The communication system of claim 16 wherein the first device comprises a pager, a personal digital assistant, or a cellular phone.

18. The communication system of claim 15 wherein the call set-up message comprises a Transaction Capabilities Application Part query.

19. The communication system of claim 15 wherein the alert message comprises a called number, a dialed number, or a caller number.

20. The communication system of claim 15 wherein the processor is configured to determine whether the incoming call is to be intercepted for a called party.



21. The communication system of claim 15 wherein the processor is configured to generate a session for the incoming call with a session identifier.

22. (Canceled).

23. The communication system of claim 15 further comprising a switching system connected to the SCP and configured to process the routing instruction that connects the incoming call with the second device.

24. A method of operating a first device where the first device is a wireless device, the method comprising:

- receiving an alert message indicating an incoming call and caller information from a service control point into the first device;

- processing the alert message;

- determining the incoming call should be sent to a second device;

- generating a response message indicating the second device is to receive the incoming call; and

- transmitting the response message from the first device to the service control point.

25. The method of claim 24 wherein the first device comprises a pager, a personal digital assistant, or a cellular phone.

26. The method of claim 24 wherein the alert message comprises a called number, a dialed number, or a caller number.

27. A software product for a wireless communication device comprising:

- wireless communication device software operational when executed by a processor to direct the processor to receive an alert message indicating an incoming call and caller information from a service control point, process the alert message, determine a destination communication device for the incoming call, where the destination communication device is

different from the wireless communication device, generate a response message indicating the destination communication device to receive the incoming call, and transmit the response message to the service control point; and

a software storage medium operational to store the wireless communication device software.

28. The software product of claim 27 wherein the wireless communication device comprises a pager, a personal digital assistant, or a cellular phone.

29. The software product of claim 27 wherein the alert message comprises a called number, a dialed number, or a caller number.

30. A wireless communication device comprising:

a processor configured to receive an alert message indicating an incoming call and caller information from an interface, process the alert message, determine a destination communication device for the incoming call, where the destination communication device is different from the wireless communication device, generate a response message indicating the destination communication device to receive the incoming call, and transmit the response message to the interface; and

the interface connected to the processor and configured to transfer the alert message from a service control point to the processor and transfer the response message from the processor to the service control point.

31. The wireless communication device of claim 30 wherein the wireless communication device comprises a pager, a personal digital assistant, or a cellular phone.

32. The wireless communication device of claim 30 wherein the alert message comprises a called number, a dialed number, or a caller number.